

REMARKS

The present amendments and remarks are in response to the Office Action mailed July March 10, 2005, where claims 1-11 and 15 were rejected, claims 12-14 were objected to, and claims 16-33 were withdrawn from consideration.

Reconsideration of the application is respectfully requested in view of the amendments and the following responsive remarks. For the Examiner's convenience and reference, the Applicants' remarks are presented in the order in which the corresponding issues were raised in the Office Action.

In the Office Action mailed March 10, 2005:

- 1) the specification was objected to for certain informalities;
- 2) claim 5 was objected to for certain informalities;
- 3) claims 1-11 and 15 were rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,412,087 (hereinafter "McGall") in view of U.S. Publication No. 2002/0058252 (hereinafter "Ananiev"); and
- 4) claims 12-14 were indicated as being allowable if rewritten in independent form.

Reconsideration of these rejections is respectfully requested.

Objection to Specification

The Examiner has rejected to certain language in the specification, and the Applicant cannot determine exactly why this language was objected to. However, the Applicant has voluntarily amended the term “mechanism” to the term “method” to clarify the discussion. This amendment does not change the scope of the discussion in this area in any way. Withdrawal of this rejection is respectfully requested.

Objection to Claim 5

Claim 5 has been amended to include the word “and” at the end of the Markush group. Withdrawal of this rejection is respectfully requested.

Rejection of Claims 1-11 and 15 under 35 U.S.C. 103(a)

Claims 1-11 and 15 were rejected under 35 U.S.C. 103(a) as being unpatentable over McGall in view of Ananiev.

McGall teaches grafting substrates with photoprotected groups, such as photoprotected thiol, which can be activated for use to immobilize ligands and/or anti-ligands. Thus, the attachment of the photoprotected groups to the substrate is typically by surface reaction chemistry. For example, the preparation of surface modified substrates of McGall is described generally in column 7, lines 21-48. Examples given include providing chemical derivation or activation of the “caged” compound carrying the thiol group. In more detail, methods include using a bifunctional crosslinking reagent, such as diepoxide, which both activates the surface of the substrate and provides a group that reacts with the activated compound carrying the caged thiol group. The caged thiol can be “uncaged” using 280 nm to 420 nm ultraviolet light. There is not teaching or suggestion whatsoever in McGall of forming latex particles using emulsion polymerization.

Ananiev teaches of a method of selecting sets of short shared nucleotide sequences form nucleic acid populations using probes. It appears that Ananiev was cited because McGall does not mention the term “latex” in the specification. However, latex is only mentioned with respect to substrates that can be used in accordance with the teachings of Ananiev. The latexes are not formed by emulsion polymerization using protected monomers as required by the claimed invention.

The Applicant has amended the claims to require that the polymerizing step is by emulsion polymerization. Neither McGall nor Ananiev discuss emulsion polymerization, and thus, a *prima facie* case of obviousness cannot be maintained.

To provide some background regarding the emulsion polymerization process, a monomer mix is typically emulsified in an aqueous phase, and the discontinuous phase of the emulsion monomer mix is emulsified within the aqueous phase. In accordance with the present invention, a photo labile group is used to protect functional groups of at least one of the monomer types used in the monomer phase of the emulsion. After polymerization, the emulsion is converted to latex particulates that are suspended in a latex composition. When the polymer particulates are exposed to ultraviolet light, the photo labile groups are removed from the polymer.

The Applicant is not claiming to have invented the use of photo labile groups generally. Rather, the Applicant has invented a novel process of emulsion polymerization using photo labile groups. As neither reference teaches or suggests this concept, withdrawal of this rejection is respectfully requested.

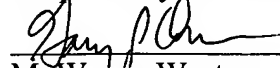
CONCLUSION

In view of the foregoing, Applicants submit that claims 1-15 present allowable subject matter and allowance is respectfully requested. If any impediment to the allowance of these claims remains after consideration of the above remarks, and such impediment could be removed during a telephone interview, the Examiner is invited to telephone Brad Haymond at (541) 715-0159 so that such issues may be resolved as expeditiously as possible.

Please charge any additional fees except for Issue Fee or credit any overpayment to
Deposit Account No. 08-2025.

Dated this 10 day of June, 2005.

Respectfully submitted,



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